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Hobson et al.

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(54) **HANDHELD ELECTRONIC DEVICE WITH
CABLE GROUNDING**

(56) **References Cited**

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(*) Notice: Subject to any disclaimer, the term of this
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claimer.

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(57) **ABSTRACT**

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(51) **Int. Cl.**

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H01Q 1/44	(2006.01)
H01Q 1/46	(2006.01)
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(52) **U.S. Cl.**

USPC **343/702**; 343/846; 343/905; 343/906

(58) **Field of Classification Search**

USPC 343/741, 767, 846, 905, 906, 702

See application file for complete search history.

A handheld electronic device may be provided that contains a
conductive housing and other conductive elements. The con-
ductive elements may form an antenna ground plane. One or
more antennas for the handheld electronic device may be
formed from the ground plane and one or more associated
antenna resonating elements. Transceiver circuitry may be
connected to the resonating elements by transmission lines
such as coaxial cables. Ferrules may be crimped to the coaxial
cables. A bracket with extending members may be crimped
over the ferrules to ground the coaxial cables to the housing
and other conductive elements in the ground plane. The
ground plane may contain an antenna slot. A dock connector
and flex circuit may overlap the slot in a way that does not
affect the resonant frequency of the slot. Electrical compo-
nents may be isolated from the antenna using isolation ele-
ments such as inductors and resistors.

20 Claims, 38 Drawing Sheets

